

REMARKS

Claims 1-25 are pending in the present application. In the Office Action mailed April 20, 2007, the Examiner rejected claims 12-19 under 35 U.S.C. §112, second paragraph, as being indefinite. The Examiner next rejected claims 20-25 under 35 U.S.C. §101 as being directed to non-statutory subject matter. Claims 1, 2, 10, 20, 21, and 25 were rejected under 35 U.S.C. §102(b) as being anticipated by Ookawa (US Pub. 2001/0004211) (hereinafter Ookawa). Claims 3-6, 9, and 22 were rejected under 35 U.S.C. §103(a) as being unpatentable over Ookawa, in view of Zhou (US Pub. 2005/0007110) (hereinafter Zhou). Claims 7 and 8 were rejected under 35 U.S.C §103(a) as being unpatentable over Ookawa in view of Stephen J. Riederer, "Current Technical Development in Magnetic Resonance Imaging", IEEE Engineering in Medicine and Biology Magazine, September/October 2000 (hereinafter Riederer). Claims 11-16 and 18 were rejected under 35 U.S.C §103(a) as being unpatentable over Zhou, in view of Ookawa. Claims 17 and 23 are rejected under 35 U.S.C §103(a) as being unpatentable over Zhou, in view of Ookawa, and further in view of Riederer. Claim 19 was rejected under 35 U.S.C §103(a) as being unpatentable over Zhou, in view of Ookawa, and further in view of Laub (USP 6,380,740) (hereinafter Laub). Claims 23 and 24 were rejected under 35 U.S.C §103(a) as being unpatentable over Ookawa, in view of Zhou, and further in view of Laub.

The drawings were objected to by the Examiner for failing to comply with 37 CFR 1.84(p)(5), because of inconsistent reference numbers. In particular, the Examiner stated that the "reference sign(s) mentioned in the specification in paragraph [0029], page 15 with respect to figure 2 and, paragraph [0030] page 16 with respect to figure 3." *Office Action*, 4/20/07, pg.2. Applicant has submitted herewith replacement sheets for Figs. 2 and 3 to correct the typographical errors. Applicant believes the figures are now consistent with paragraphs [0029] and [0031] and, thus, comply with 37 CFR 1.84(p)(5) and 37 CFR 1.21(d). Applicant, therefore, respectfully requests that the Examiner withdraw the objection to the drawings.

Claim 18 was objected to by the Examiner for "lacking antecedent basis in the specification with reference to 'at least one of a heart ... region.'" *Office Action*, 4/20/07, pg.3. Applicant has amended paragraph [0026] to address the Examiner's concern, and now respectfully requests withdrawal of the objection to claim 18.

The Examiner also objected to claims 23 and 24, because of informalities. Applicant has amended claim 23 and 24 to correct the misspelled words and typographical errors. In light of

these corrections, the Applicant requests that the Examiner withdraw the objections to claims 23 and 24.

The Examiner rejected Claims 12-19 under 35 U.S.C. § 112, second paragraph, as being indefinite, due to improperly recited dependency. Applicant has amended claims 12, 13, and 15-19 to correct these typographical errors such that claims 12, 13, and 15-19 now properly reflect dependence from claim 11. Applicant respectfully requests that the Examiner withdraw rejections to claims 12-19 under § 112.

The Examiner next rejected claims 20-24 under 35 U.S.C. § 101. The Examiner stated, as a basis for the rejection, that independent claim 20 “lacks storage on a medium that enables underlying functionality to occur.” *Office Action*, 4/20/07, pg.6. Applicant has amended independent claim 20 to include the computer readable storage medium described in paragraphs [0012] and [0033] of the Specification. The claims depending from claim 20 have been similarly amended. Applicant believes that the Examiner’s concerns have been addressed and respectfully requests that the Examiner withdraw the § 101 rejections to independent claim 20 and all claims depending therefrom.

Substantively, the Examiner rejected independent claim 1 under 35 U.S.C. § 102(b) as being anticipated by Ookawa. Applicant has amended claim 1 to recite an “elliptical centric acquisition order.” Ookawa cannot be said to teach or suggest such an acquisition order, since Ookawa only generically describes Figs. 2-5 as depicting a “3 DFT” pulse sequence which uses slice, frequency, and phase encoding gradients. *Ookawa*, ¶¶ [0022]-[0027]. The use of such encoding gradients is common to most 3D acquisition techniques, and does not indicate the use of any particular acquisition order or k-space trajectory. This generality is illustrated by the fact that Figs. 2-5 of Ookawa do not show any particular values of these encoding gradients or any increasing/decreasing trends thereof. *See Ookawa*, Figs. 2-5 (slice and encoding gradients are illustrated, in each TR, as generic). Therefore, Ookawa cannot be said to positively **teach** or **suggest** an elliptical centric acquisition order. As such, Applicant believes that claim 1 is patentably distinct from the art of record and respectfully requests withdrawal of the Examiner’s rejection to claim 1, and all claims depending therefrom.

The Examiner also rejected independent claim 20 under 35 U.S.C. § 102(b) as being anticipated by Ookawa. Though Applicant respectfully disagrees with the Examiner’s assessment of the art, Applicant has nevertheless amended claim 20. Since the Ookawa reference does not teach or suggest the “dummy acquisitions” recited in amended claim 20, Applicant respectfully requests that the Examiner withdraw the § 102(b) rejections to independent claim 20 and all

dependent claims therefrom. Dependent claims 22 and 25 have also been amended, in light of the amendments to claim 20.

The Examiner rejected several claims under 35 U.S.C. §103(a), including independent claim 11, based in part on Zhou. The Zhou reference was filed on June, 27, 2003, and published on January, 13, 2005. Since the publication date of Zhou is after the filing date of the present application, October 15, 2003, Zhou can only qualify as prior art under 35 U.S.C. §102(e). However, since the present application and Zhou were, at the time the invention was made, owned by and/or subject to an obligation of assignment to the same entity, Zhou cannot be cited in a rejection against the claimed invention under 35 U.S.C. §103(a). See MPEP §706.02(I). The Zhou patent and the present application are both assigned to GE MEDICAL SYSTEMS GLOBAL TECHNOLOGY COMPANY, LLC. Such assignments are recorded at Reel/Frame #013764/0204 and #016212/0534 and at Reel/Frame #014199/0350, respectively. Accordingly, since Zhou is not available as prior art for a rejection under §103(a), a *prima facie* case of obviousness has not been made. Applicant, therefore, respectfully requests withdrawal of the rejection of claim 11 and all claims depending therefrom.

Therefore, in light of at least the foregoing, Applicant respectfully believes that the present application is in condition for allowance. As a result, Applicant respectfully requests timely issuance of a Notice of Allowance for claims 1-24.

Applicant appreciates the Examiner's consideration of these Amendments and Remarks and cordially invites the Examiner to call the undersigned, should the Examiner consider any matters unresolved.

Respectfully submitted,

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General Authorization and Extension of Time

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 07-0845. Should no proper payment be enclosed herewith, as by credit card authorization being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 07-0845. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extensions under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 07-0845. Please consider this a general authorization to charge any fee that is due in this case, if not otherwise timely paid, to Deposit Account No. 07-0845.

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